

N THE CLAIMS:

Please CANCEL claims 28 and 30 without prejudice or waiver of its subject matter.

Please AMEND claims 1, 5-7, and 31 as follows. All claims currently pending in the application are reproduced below in accordance with current U.S. Patent and Trademark Office Requirements.

1. (Currently Amended) A DC motor control method in a device which drives a mechanism by using a DC motor as a power source, comprising:

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function based on an elapsed time after a start of deceleration;

a first determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said first determination step;

a second determination step for determining whether the elapsed time has exceeded a predetermined time, when said mechanism does not arrive at the predetermined position; and

a third velocity command value generation step for outputting a constant velocity command value to said DC motor, when it is determined in said second determination step that the elapsed time has exceeded the predetermined time.

2-4. (Cancelled).

5. (Currently Amended) A program product for realizing a DC motor control method in a device which drives a mechanism by using a DC motor as a power source, including program code for realizing:

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function based on an elapsed time after a start of deceleration;

a first determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said first determination step;

a second determination step for determining whether the elapsed time has exceeded a predetermined time, when said mechanism does not arrive at the predetermined position; and

a third velocity command value generation step for outputting a constant velocity command value to said DC motor, when it is determined in said second determination step that the elapsed time has exceeded the predetermined time.

6. (Currently Amended) A storage medium storing a program for realizing a DC motor control method in a device which drives a mechanism by using a DC motor as a power source, storing program codes for realizing:

a first velocity command value generation step for generating a velocity command value to said motor in accordance with a first function based on an elapsed time after a start of deceleration;

a first determination step for determining whether said mechanism arrives at a predetermined position within a deceleration region; and

a second velocity command value generation step for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated in said first velocity command value generation step, upon the determination that said mechanism arrives at the predetermined position in said first determination step;

a second determination step for determining whether the elapsed time has exceeded a predetermined time, when said mechanism does not arrive at the predetermined position; and

a third velocity command value generation step for outputting a constant velocity command value to said DC motor, when it is determined in said second determination step that the elapsed time has exceeded the predetermined time.

7. (Currently Amended) A DC motor control apparatus in a device which drives a mechanism by using a DC motor as a power source, comprising:

first velocity command value generation means for generating a velocity command value to said motor in accordance with a first function based on an elapsed time after a start of deceleration;

second velocity command value generation means for generating a velocity command value to said motor in accordance with a second function having an initial value less than a minimum value of the velocity command value generated by said first velocity command value generation means; ~~and~~

change means for changing the velocity command value of said motor generated by said first velocity command value generation means to the velocity command value generated by said second velocity command value generation means, ~~at predetermined timing~~ when said mechanism arrives at a predetermined position within a deceleration region; and

third velocity command value generation means for outputting a constant velocity command value to said DC motor, when the elapsed time has exceeded a predetermined time and said mechanism does not arrive at the predetermined position.

8. (Cancelled).

9. (Previously Presented) The DC motor control apparatus according to claim 7, wherein said first function represents a curve profile, and said second function outputs a constant value.

10. (Original) The DC motor control apparatus according to claim 9, wherein said first function is a cubic function.

11-24. (Cancelled).

25. (Previously Presented) The DC motor control method according to claim 1, wherein said device is a printing apparatus and said mechanism is a conveyance mechanism for printing medium.

26. (Previously Presented) The DC motor control apparatus according to claim 7, wherein said change means performs the changing a plurality of times so as to decrease the velocity command value.

27. (Previously Presented) The DC motor control apparatus according to claim 7, wherein said device is a printing apparatus and said mechanism is a conveyance mechanism for a printing medium.

28. (Cancelled)

29. (Previously Presented) The DC motor control apparatus according to claim 1, wherein the minimum value of the velocity command generated by said first velocity command value generation step and the initial value of the second function are discontinuous.

30. (Cancelled)

31. (Currently Amended) The DC motor control apparatus according to claim 7, wherein the minimum value of the velocity command generated by said first velocity command value generation means and the initial value of the second function are discontinuous.[--]